

REVISED VERSION

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 June 2004 (03.06.2004)

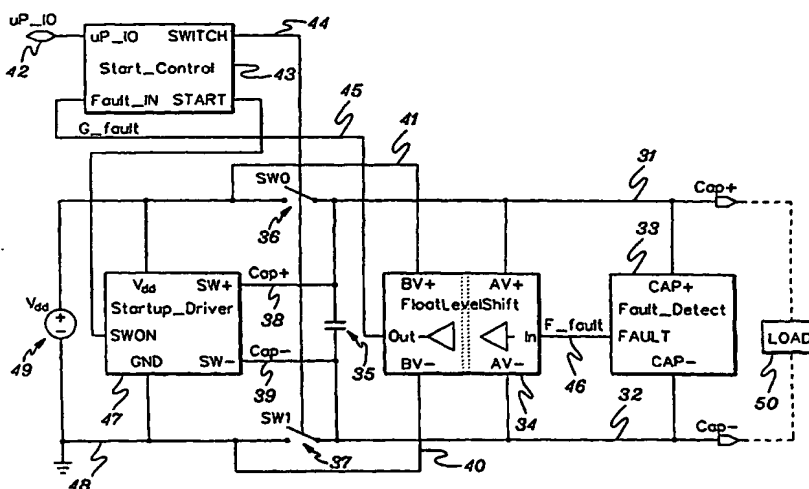
PCT

(10) International Publication Number
WO 2004/047303 A1

- (51) International Patent Classification⁷: **H02M 3/07**
- (21) International Application Number:
PCT/IB2003/005184
- (22) International Filing Date:
15 November 2003 (15.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/427,633 18 November 2002 (18.11.2002) US
10/607,749 27 June 2003 (27.06.2003) US
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Declaration under Rule 4.17:
— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,

[Continued on next page]

(54) Title: PROTECTION CIRCUIT AND METHOD FOR FLOATING POWER TRANSFER DEVICE



(57) Abstract: A protection circuit and method are provided for a floating power transfer device having one or more switches for controlling charging of a reservoir capacitor across which a load is applied when in use. The protection circuit includes a control circuit (43), a fault detection circuit (33) and a precharge driver circuit (47). The control circuit (43) at least partially controls switching of the at least one switch, while the fault detection circuit (33) detects when a fault in the floating power transfer device or the load occurs and sends a fault detect signal to the control circuit (43) in response thereto. The precharge driver circuit (47), which is enabled by the control circuit (43) responsive to receipt of the fault detect signal, attempts to precharge the reservoir capacitor (35) to a voltage level sufficient for switching of the one or more switches (36, 37) to proceed without damaging the switches (36, 37).

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CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

— with international search report

(88) Date of publication of the revised international search report: 24 June 2004

(15) Information about Correction:

see PCT Gazette No. 26/2004 of 24 June 2004, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

REVISED
VERSION

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/05184

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H02M3/07

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H02M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 257 810 A (PLESSEY OVERSEAS) 2 March 1988 (1988-03-02) column 5, line 36 - column 6, line 28; figures 4,5	1-19
A	US 2002/008499 A1 (HENRY GEORGE C) 24 January 2002 (2002-01-24) column 5, paragraph 77 - column 6, paragraph 81; figures 4-6	1-19
A	DE 100 45 693 A (INFINEON TECHNOLOGIES AG) 4 April 2002 (2002-04-04) abstract; figure 1	
A	EP 1 065 784 A (TEXAS INSTRUMENTS DEUTSCHLAND) 3 January 2001 (2001-01-03) abstract; figure 1	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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"P" document published prior to the International filing date but later than the priority date claimed

"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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"&" document member of the same patent family

Date of the actual completion of the international search

12 May 2004

Date of mailing of the International search report

17 MAR 2004

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INTERNATIONAL SEARCH REPORT

PCT/03/05184

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